

Abstract Of The Disclosure

A device and a method are described for bidirectional single-wire data transmission of information between a control unit and at least one peripheral unit, having the following steps: generating a first current flow from the control unit to the peripheral unit during first
5 time slots via a single-wire line to transmit voltage-coded or current-coded information from the control unit to the peripheral unit; and/or generating a second current flow from the peripheral unit to the control unit during second time slots via the single-wire line to upload voltage-coded or current-coded information from the peripheral unit to the control unit; the first and second time slots being implemented so they do not mutually overlap; and/or
10 generating, in the first and/or second time slots, additional information to be transmitted and/or uploaded, which is transmitted as digital or analog signals by modulating the current or the voltage of the single-wire line and is analyzed in the control unit or the peripheral unit.